

Remarks

Favorable review is requested in view of the following remarks. Claims 1 - 23 are pending in the application.

Notice of References Cited

Applicants noticed that Nakamura et al. (U.S. Patent No. 5,738,927) was not listed on the PTO 892 form attached with the Office Action dated July 2, 2003. Applicants request that Nakamura et al. be listed on a PTO 892 form.

Election/Restriction

Applicants hereby authorize the cancellation of non-elected claims 24 - 27 without prejudice or disclaimer.

Rejection under 35 U.S.C. § 103

Claims 1 - 9, 11 - 19, and 22 - 23 were rejected under 35 U.S.C. § 103(a) as being unpatentable over EP 0898273 (EP '273) in view of Nakamura et al. (above). Applicants respectfully traverse this rejection, and respectfully request reconsideration in view of the following comments.

A rejection of claims under section 103 requires the Examiner to show an unrebutted prima facie case of obviousness. When the rejection is based on a combination of prior art references, there must be some teaching, suggestion, or motivation to combine the references. See In re Rouffet, 47 U.S.P.Q.2d 1453, 1456 (Fed. Cir. 1998). The possible sources to teach, suggest, or motivate the combination of references are the nature of the problem to be solved, the teachings of the prior art, and the knowledge of the persons of ordinary skill in the art. See Id. at 1357.

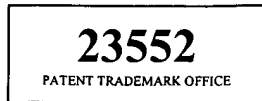
Here there is no motivation, suggestion, or teaching to combine EP '273 and Nakamura et al. As noted by the Examiner, EP '273 relates to a rewritable phase change recording medium comprising a substrate and a recording layer having a reversible phase change. In contrast,

Nakamura et al. relates to a perpendicular magnetic recording medium and is relied upon for disclosing a lattice defect.

Nakamura et al. intend to orient a recording film vertically with respect to a substrate so that the magnetization direction will be anisotropic. See column 2, lines 39 - 62 of Nakamura et al. That is, Nakamura et al. is directed at orienting the spin direction perpendicular to the plane of the substrate. See column 2, lines 46 - 49 of Nakamura et al. Conversely, phase change recording media, like the claimed invention and EP '273, require the material to be symmetrical and isotropic. Isotropy is desired in phase change recording media to increase the diffusion-migration of atoms, which is not a concern of magnetic recording media. Magnetic recording media focus on the change of the magnetic spin. Therefore, there would be no motivation, suggestion, or teaching to combine Nakamura et al. and EP '273.

In addition, the purposes of the lattice defects magnetic for recording media and phase change recording media are completely different. The lattice defects for the claimed invention are introduced to decrease the density. See page 20, lines 1 - 2 of the application. This reduces the volume variation between the crystalline phase and amorphous phase, decreasing any deformation or perforation caused by the phase change. See page 20, lines 2 - 5 of the application. However, the lattice defects for Nakamura et al. are introduced to increase the anisotropy in the crystal of the magnetic recording media (directly teaching away from the claimed invention), thereby, increasing the strength of the perpendicular magnetization. See column 6, lines 10 - 23 of Nakamura et al. Thus, there would have been no motivation, suggestion, or teaching to combine Nakamura et al., which is concerned with anisotropy, and EP '273, which is concerned with isotropy. Furthermore, there would have been no reasonable expectation from the prior art that the present invention successfully could be obtained upon making the combination of the reference teachings. See In re Dow Chemical, 5 U.S.P.Q.2d (Fed. Cir. 1988).

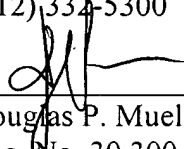
In view of the above remarks, favorable reconsideration in the form of a Notice of Allowance is respectfully requested. If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone the undersigned at the below-listed telephone number.



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Respectfully submitted,

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